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G4H HTAA H1A H13D  
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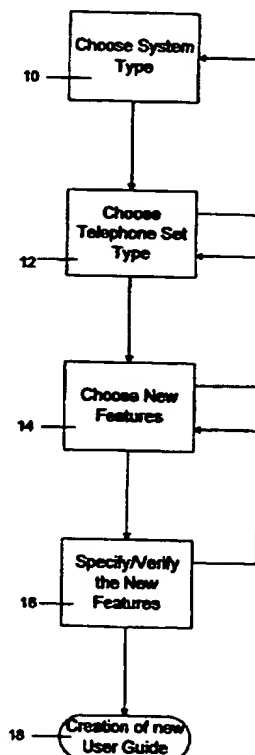
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EP 0216063 A2 EP 0185904 A1

(58) Field of Search  
UK CL (Edition P ) G4H HTAA HTAT  
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(54) Abstract Title  
Editable customized document creation tool

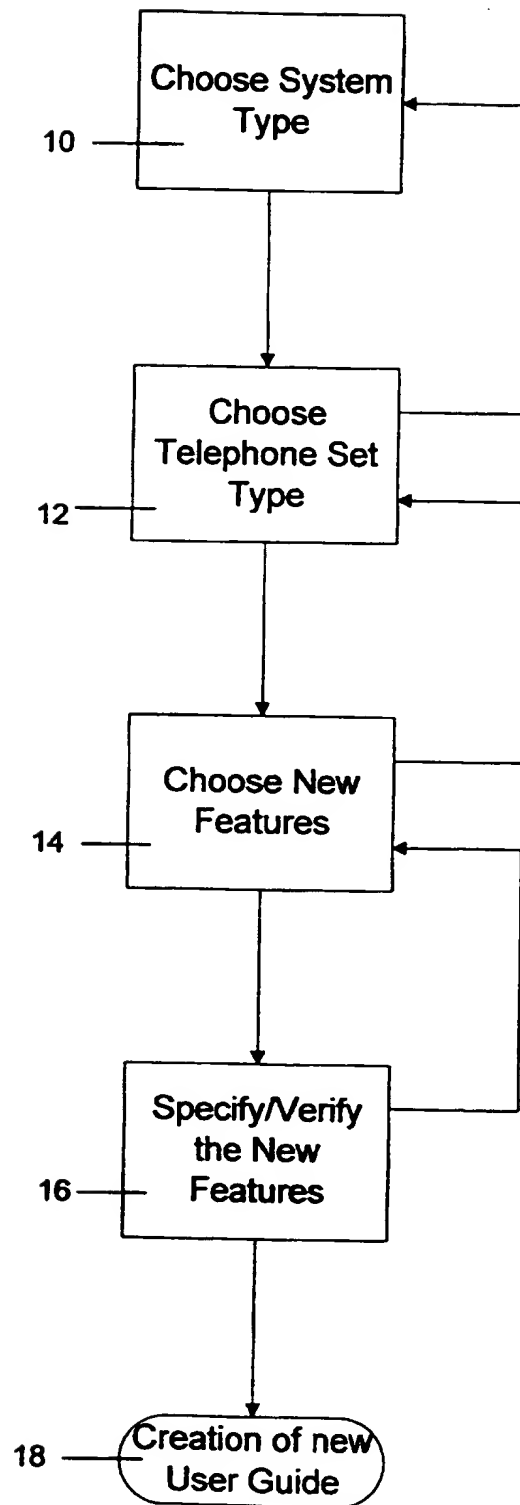
(57) A method of producing a customized document (e.g. user guide) comprises the steps of generating at least one graphical user interface for user selection of one of a plurality of subject matter types; generating at least one further graphical user interface in response to the user selection of one of the plurality of subject matter types, for user selection of at least one of a plurality of features associated with the subject matter types; retrieving, concatenating and displaying a plurality of stored source text portions directly related to the selected subject matter types and features to create the customized document; and printing and saving the customized document.

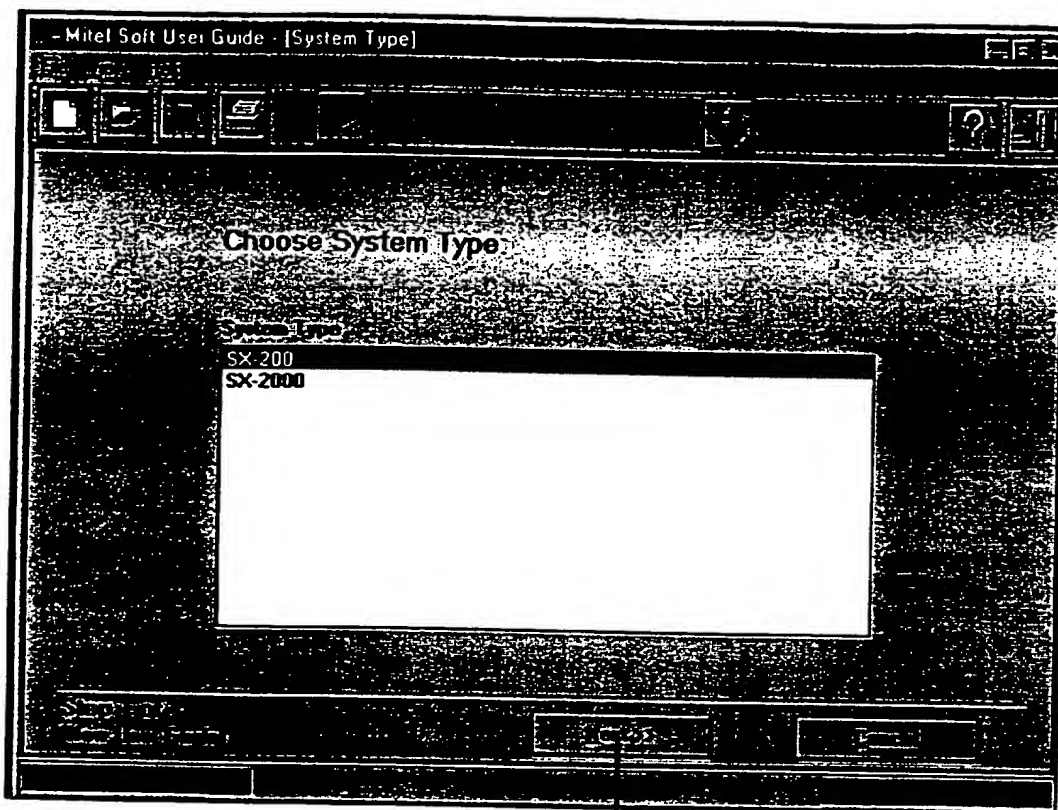
FIGURE 1



GB 2 329 500 A

FIGURE 1





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FIGURE 2

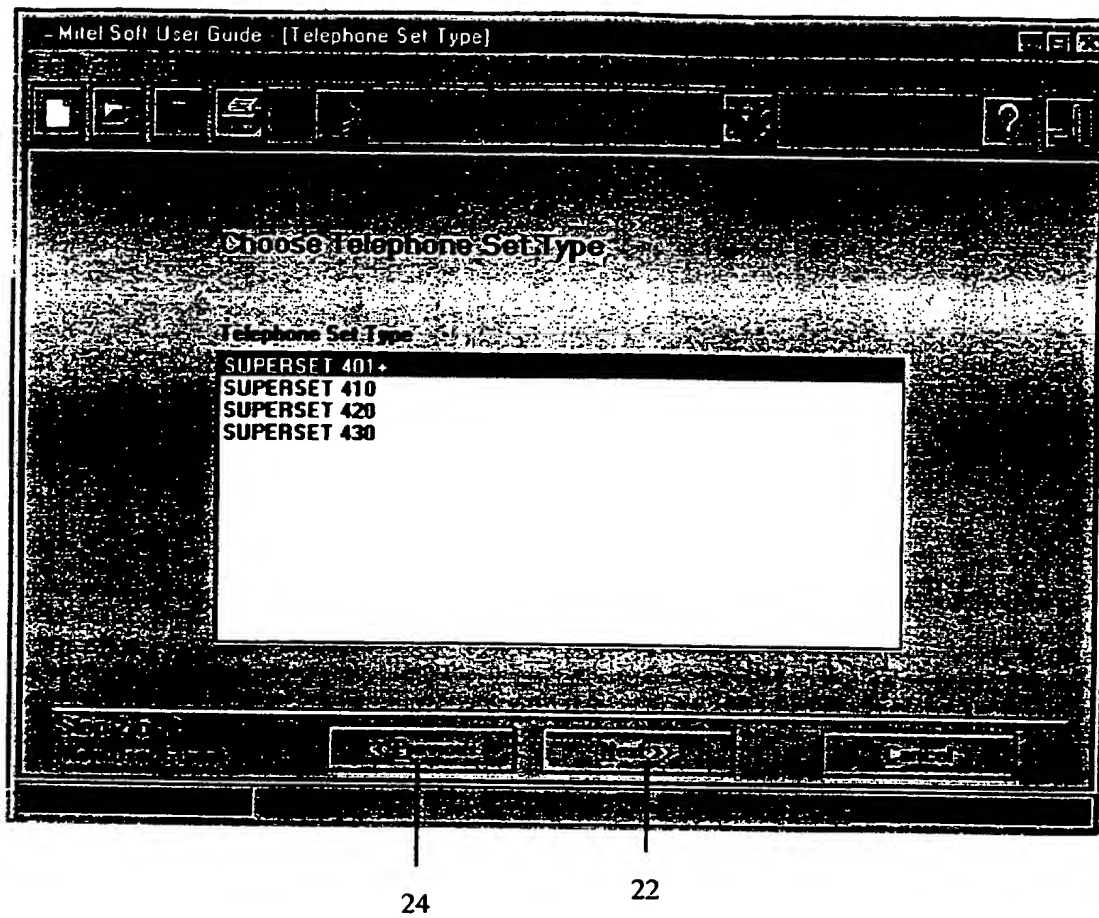
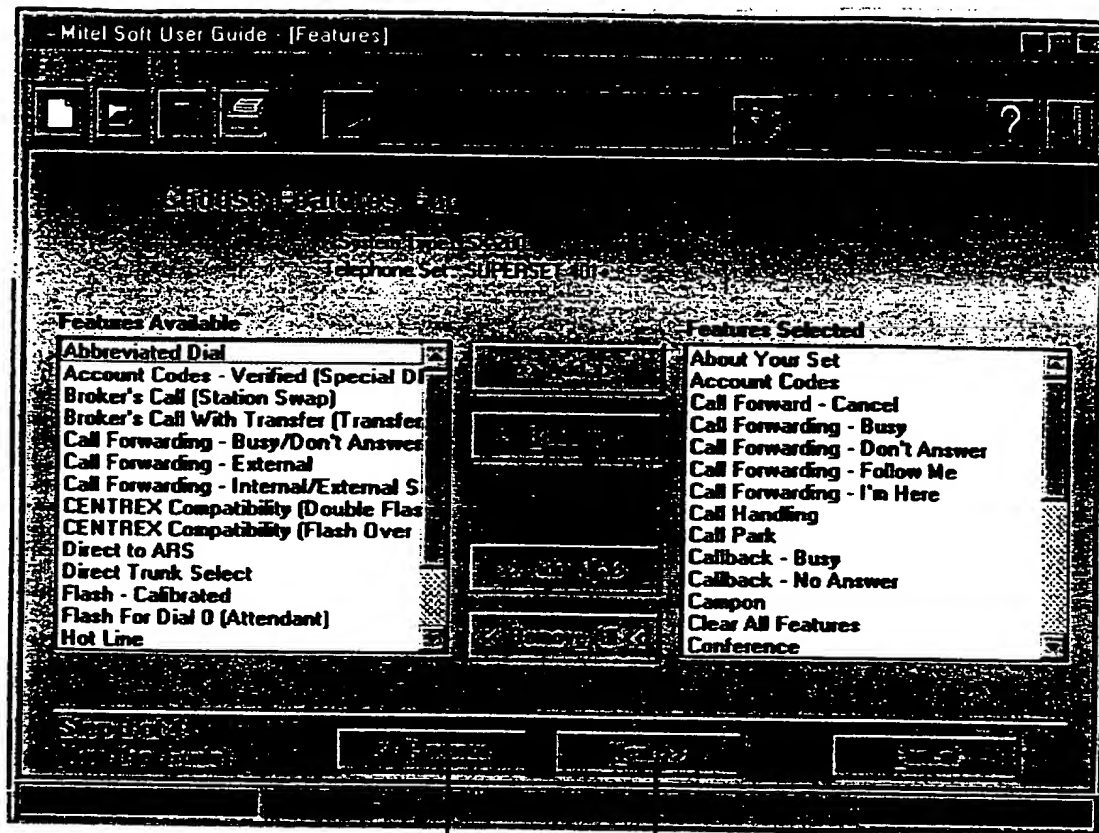


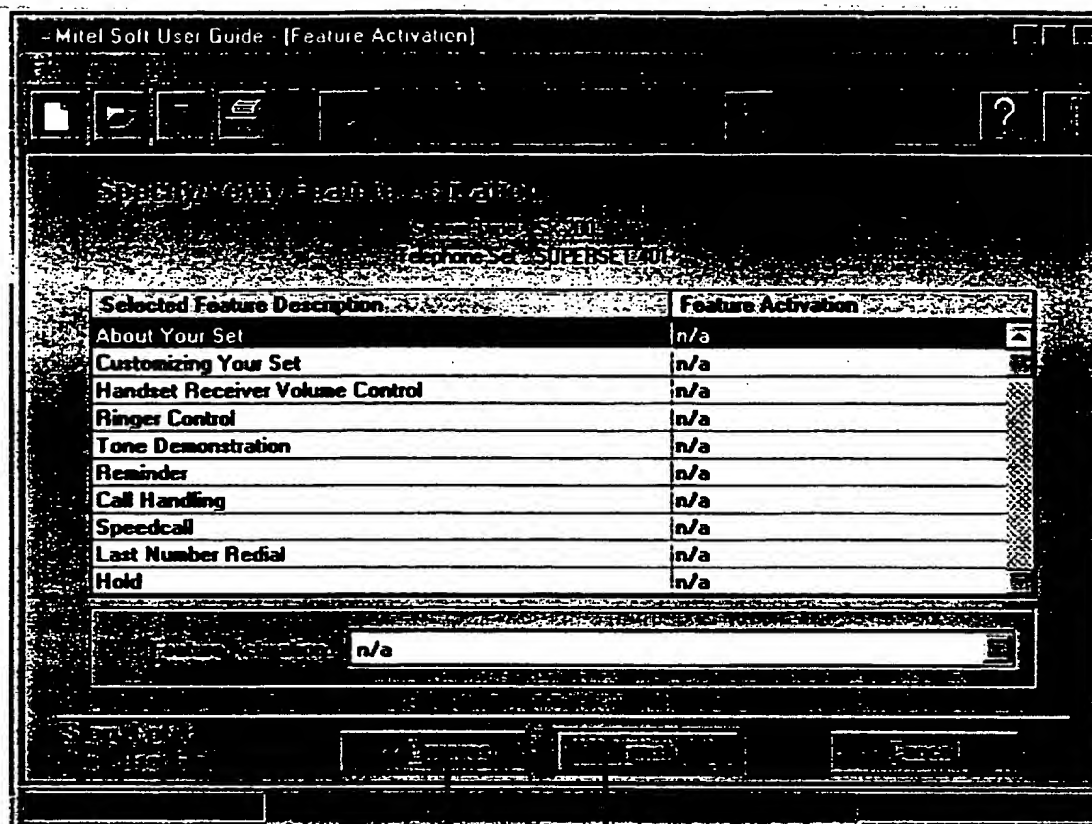
FIGURE 3



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FIGURE 4



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FIGURE 5

EDITABLE CUSTOMIZED USER GUIDE CREATION TOOL

## FIELD OF THE INVENTION

- 5 This invention relates in general to user guides provided to the public to aid in their understanding of a product and more specifically to a method of producing a customized user guide to include a description of extra added features of the product.

## BACKGROUND OF THE INVENTION

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It is extremely well known in the fields of sales and marketing to provide a user guide in the packaging for a consumer or industrial product. The goal of such guides is to help the end user install and operate the new product. The user guide is intended to be helpful and is usually written in a simple and friendly style for ease of understanding.

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Many products are sold with standard features which are upgradable by the product distributor to add additional features requested by a customer (e.g. automobile and programmable PABXs to name but two). In such circumstances it is desirable that a new user guide be provided to the customer to ensure that the customer understands how to use the new product. A new user guide most likely incorporates information from the basic user guide since the basic features do not change. Clearly, it would be tedious and annoying to be required to type all of the old information for incorporation into the new user guide.

Many dealers in North America use pre-written user guides (e.g. Mitel® Corporation's Telephone Set User Guides) as raw material for their own customized guides. Dealers customize these user guides in order to increase their profit margin, their visibility, and their customer's satisfaction. The customized dealer's user guides range in quality from photocopied, typewritten pages to semi-professional-looking pages that are created using word processing packages. There is a large range in quality because each dealer has different expectations and resources available to it for customizing its user guides.

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One problem with traditional paper-based user guides is that one is required for each of a plurality of system and language variants. For example, in the case of the Mitel® 400-series telephones, thirty-four variants of the telephone set user guide have been produced and

maintained due to the large variety of programmable features available to different buyers and dealers.

## SUMMARY OF THE INVENTION

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According to the present invention, an editable customized user guide creation tool is provided for reducing a company's cost of producing user guides. It is clearly more convenient for a dealer to have a tool to customize user guides for their customers than to be required to type each different customized user guide separately. In addition to the usefulness  
10 of the tool according to the invention, the amount of writing, printing costs, shipping costs, inventory costs and re-issuing costs are reduced.

The editable customized user guide creation tool according to the invention also provides a method to allow purchasers of a product the opportunity to update the product's user guide to  
15 conform to their own specifications. This saves time and effort on the part of typists and allows them to focus on other aspects of their employment. It also provides purchasers the opportunity to conform all sections of the user guide stylistically in order to provide an impressive looking document for the customer.

20 By providing dealers with a tool that produces fully-customized user guides, using a basic user guide as reference, the dealers save time and are guaranteed that the customized user guide product is consistent with the basic user guide in terms of its layout. User guides created with the tool of the present invention ensure the correct use of company trademarks and result in a more professional looking user guide than is possible according to prior art  
25 cut-and-paste user guides.

The editable customized user guide creation tool of the preferred embodiment is implemented as a Windows® application that is deliverable via diskette.

## 30 BRIEF DESCRIPTION OF THE DRAWINGS

An embodiment of the invention is described below with reference to the accompanying drawing, in which



Figure 1 is a flowchart showing operation of the User Guide Creation Tool according to the invention.

- 5 Figure 2 is a screen print of a graphical user interface for user selection of a system type in accordance with the process of the preferred embodiment.

Figure 3 is a screen print of a graphical user interface for user selection of a telephone set type in accordance with the process of the preferred embodiment.

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Figure 4 is a screen print of a graphical user interface for user selection of predetermined features for the selected system and telephone set types in accordance with the process of the preferred embodiment.

- 15 Figure 5 is a screen print of a graphical user interface for user verification of selected features in accordance with the process of the preferred embodiment.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

- 20 In Figure 1, a process is depicted for producing a customized user guide for a telephone system and telephone set combination. In order to initiate the creation of the customized user guide, the user must firstly choose a system type (step 10), discussed in greater detail below. Next, at step 12, the user selects a telephone set type. After choosing the telephone set type, features for the chosen system and telephone set type combination are selected (step 14). At  
25 step 16, prior to the creation of the customized user guide (step 18), the user specifies and verifies feature activations for the chosen system and telephone set type combination.

- As shown in Figures 2 -5, each step of the inventive process results in generation of explanatory dialogue boxes guiding the user through the process steps. In the preferred  
30 embodiment, by selecting options in the dialogue boxes, one can produce a user guide that is tailored to one's:

- telephone system
- telephone set
- telephone features, and
- feature activation methods

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In the illustrated embodiment, the choice of system types is limited to two selections, a SX-200 and a SX-2000 system (Figure 2). Both of these are telephones systems manufactured by Mitel® Corporation. It will be appreciated that a larger selection is possible and that the system types need not be restricted to telephony systems but may relate to any product for which a user guide may be referred (e.g. automobiles, household appliances etc.).

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The user chooses from one of the two selections by the point-and-click method of computer mouse operating in order to highlight the selected system type. The user then clicks on the Next button 20 in order to advance to the next step 12 in order to allow the user to choose the telephone set type.

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The graphical user interface of Figure 3 is then displayed, showing four different telephone set types: Superset 401+, Superset 410, Superset 420 and Superset 430. These telephone sets are also manufactured by Mitel® Corporation, but can relate to any sub-type of the system type selected at step 10 (e.g. a particular model of a selected car brand). After choosing the telephone set, the Next button 22 is once again depressed in order to advance the buyer or dealer to the selection of the features. The user may alternatively decide to return to the previous step 10 by clicking the Previous button 24. This allows the user the opportunity to change the system type selection.

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If the user decides to click the Next button 22 instead of the Previous button 24, a further graphical user interface is generated (step 14) as shown in Figure 4. This display allows the user to select the features for the chosen system and telephone set type combination. Once again, the user has the choice of clicking on the Next button 26 or the Previous button 28. At least one feature must be chosen by the user. After depressing the Next button 26, the final screen (Fig. 5) is generated for specification and verification of the feature activations for the chosen system and telephone set type combination. Clicking the Previous button 30 once

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again returns the user to the previous selection page (Fig. 4) while clicking the Finish button 32 causes the user guide creation tool to compile the customized user guide. Compilation of the customized user guide includes the retrieval, concatenation and displaying of stored text associated with the selected system type, telephone set type and activated features.

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Once the user guide has been generated, it can be further customized by editing text and by inserting graphics using a word processing application incorporated into the tool. The word processing application is not further described herein, and would be well known to a person of ordinary skill in the art. The finished customized user guide can be saved (either as .rtf or 10 .sug) and printed as required.

According to the preferred embodiment, the process set forth in Figure 1 and discussed in detail above with reference to Figures 2 - 5 is implemented as a computer program written using a case format. Each step of the process has an associated wizard. The names of the 15 illustrated wizards are USER\_GUIDE\_WIZ1 for generating the graphical user interface of Figure 2, USER\_GUIDE\_WIZ2 for generating the graphical user interface of Figure 3, USER\_GUIDE\_WIZ3 for generating the graphical user interface of Figure 4, and USER\_GUIDE\_WIZ4 for generating the graphical user interface of Figure 5. The names of these wizards may be changed without affecting the computer program provided that the 20 changes are performed globally (i.e. throughout the program). The wizards USER\_GUIDE\_WIZ1, USER\_GUIDE\_WIZ2, USER\_GUIDE\_WIZ3, and USER\_GUIDE\_WIZ4 are related to steps 10, 12, 14, and 16, respectively. Depending on the value of a tag in the preferred embodiment, called gActiveForm.Tag, the associated wizard is run. For instance, if the user chooses the telephone set type at step 12 (Fig. 3), the 25 gActiveForm.Tag is set as USER\_GUIDE\_WIZ2 (Fig. 3). Upon clicking of the Next button 22, the gActiveForm.Tag changes to USER\_GUIDE\_WIZ3 (Fig. 4) and the page (Fig. 4) showing the selection of features is generated. If the user decides to click on the Previous button 24, the gActiveForm.Tag is changed to USER\_GUIDE\_WIZ1 (Fig. 2) and the first page is generated allowing the user to choose the system type.

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The code for implementing the wizards according to the preferred embodiment is attached hereto as Appendix A.

The benefits of the editable customized user guide creation tool according to the present invention will be appreciated for the foregoing description. User guides created using the tool of the present invention may be made more precise than prior art generic paper guides. For example, specific access codes can be inserted into the user guide to account for variations in system types (e.g. "To Forward calls, enter 66 on your keypad", rather than "To Forward Calls, see your Communications Department for access code number assigned to your telephone"). Departing from the generic attribute of prior art paper guides provides a disincentive for dealers to create their own user guides. With the editable customized user guide creation tool of the present invention, dealers can create guides that are completely accurate for a chosen system, telephone set, feature, feature access code, customer, department, and individual within the department.

It will be appreciated that, although a particular embodiment of the invention has been described and illustrated in detail, various changes may be made. One such modification is that the created user guide does not have to be telephone related. As discussed above, the editable customized user guide creation tool of the present invention can be used for any invention in which a description of upgraded or improved features of a basic product is desired. Also, the names used to describe the wizards may be changed without affecting the program provided that all such changes are made globally (i.e. throughout the program). All such changes and modifications may be made without departing from the sphere and scope of the invention as defined by the claims appended hereto.

What is claimed is:

1. A method of producing a customized document comprising the steps of:
  - 5       a) generating at least one graphical user interface for user selection of one of a plurality of subject matter types;
  - b) generating at least one further graphical user interface in response to said user selection of said one of said plurality of subject matter types, for user selection of at least one of a plurality of features associated with said one of said subject matter types;
  - 10       c) retrieving, concatenating and displaying a plurality of stored source text portions directly related to said selected subject matter types and features to create said customized user guide; and
  - d) printing and saving said customized user guide.
- 15   2. The method of claim 1 further comprising the step of implementing a word processor application to enable editorial modifications to said customized user guide.
3. The method of claim 1 wherein each of said subject matter types relates to a predetermined telephone system.
- 20   4. The method of claim 1 wherein said step of generating at least one graphical user interface comprises generating a first graphical user interface for user selection from a plurality of telephone systems and a second graphical user interface for selecting from a plurality of telephone sets associated with individual ones of said telephone systems.
- 25   5. The method of claim 1 wherein each of each of said features relates to a predetermined telephony feature.
6. A set of computer diskettes having stored therein a computer program for implementing
  - 30       the method of claim 1.
7. The computer diskettes of claim 6 wherein said computer program is written in Visual Basic.



The  
Patent  
Office

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Application No: GB 9720023.2  
Claims searched: 1-7

Examiner: Mike Davis  
Date of search: 12 January 1998

**Patents Act 1977**  
**Search Report under Section 17**

**Databases searched:**

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.P): G4H (HTAA,HTAT)

Int Cl (Ed.6): G06F

Other:

**Documents considered to be relevant:**

Category	Identity of document and relevant passage	Relevant to claims
X	EP 0216063 A2 (IBM)	1-7
X	EP 0185904 A1 (IBM)	1-7

X Document indicating lack of novelty or inventive step  
Y Document indicating lack of inventive step if combined with one or more other documents of same category.

& Member of the same patent family

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